



**South Mountain Corridor Study
Citizens Advisory Team
Meeting Summary**

Date: May 22, 2008
Time: 6:00 p.m.
Location: South Mountain Community College

SMCAT Members Attending:

Camilo Acosta, Arlington HOA
Laurel Arndt, Ahwatukee Village Planning Committee
Sandy Bahr, Sierra Club
Lisa Bray, South Mountain/Laveen Chamber of Commerce
Tamala Daniels, South Mountain Village Planning Committee
Clayton Danzeisen, Maricopa County Farm Bureau
Peggy Eastburn, Estrella Village Planning Committee
Michael Goodman, Phoenix Mountains Preservation Council
Wes Lines, Laveen Village Planning Committee
Cathy Lopez, Foothills Reserve HOA
Dave Olney, Valley Forward
Michael Owen, The Foothills HOA
John Rodriguez, Lakewood HOA
Jack Sellers, East Valley Partnership
Brian Smith, Calabrea HOA
Timothy Stone, Bougainvillea HOA
Carola Tamarkin, Ahwatukee Foothills Chamber of Commerce
Patty Weegar, Kyrene Elementary School District

SMCAT Members Absent:

Gila River Indian Community – District 4
Silverado Ranch HOA
Al Brown, Arizona Public Health Association
Diane Kreckler, Mountain Park Ranch HOA
David Lafferty, City of Tolleson
Michael Norton, Laveen Village Planning Committee
Nathaniel Percharo, Pecos Road/I-10 Landowners Association
Laurie Prendergast, Laveen Citizens for Responsible Development
Woody Thomas, Southwest Valley Chamber of Commerce
Carnell Thurman, City of Avondale
Dave Williams, Arizona Trucking Association

Staff and Consultants

Michael Bruder, ADOT
Ed Green, ADOT
Mark Hollowell, ADOT
Mohamed Noun, ADOT
Floyd Roehrich, ADOT
Timothy Tait, ADOT
Norm Wetz, ADOT
Bill Vachon, FHWA
Mike Book, HDR

Janet Gonzalez, HDR
Heather Honsberger, HDR
Kelly Kading, HDR
Nick LaFronz, HDR
Ben Spargo, HDR
Fred Erickson, KCA
Tom Keller, KCA
Dean Howard, PDG
Andy Jacobs, PDG

Citizens:

Reed Butler
Chester Erwin
Ruben Gallego
James Gernand
Joe Hamilton
Lisa Hamilton
Jim Jochim
Steve Johnson
Jerome LaSalvia
Jim LaSalvia
Pat Lawlis
Jackson Lodge
Ted Maish
Jim Massey

Devin Mauhey
Doug Mings
Doug Murphy
William Ramsay
Jerend Rhodes
Greta Rogers
Glenn Schulke
Colleen Sparks
Tim Sprague
Connie L. Squires
Wylie Timmerman
Irene Wesley
Jim Wesley

Meeting Agenda	Speaker
Welcome and introductions	Tom Keller, KCA
SMCAT role and responsibilities	Tom Keller, KCA
Revised meeting format discussion	Tom Keller, KCA
Parking lot issues memorandum	Tom Keller, KCA
Team member questions and comments	All
Hazardous materials	Mike Bruder, ADOT Kelly Kading, HDR
Geotechnical resources	Mike Bruder, ADOT Nick LaFronz, HDR
Energy	Mike Bruder, ADOT Ben Spargo, HDR
Utilities	Mike Bruder, ADOT Ben Spargo, HDR
Visitor comment session	Public Tom Keller, KCA

Meeting began at 6:00 p.m.

Tom Keller: Good evening everyone. Can we begin, please? Welcome to the May 22 Citizens Advisory Team meeting for the proposed South Mountain Freeway. I want to welcome any members of the public who are attending for the first time. I also would like to recognize the individuals who are substituting for the regular members tonight. Michael Owen is here on behalf of Chad Blostone and representing The Foothills Homeowners Association. We also have Patty Weegar here on behalf of Terry Tatterfield and representing the Kyrene Elementary School District. Is there anyone else that is here as a substitute for a regular member?

No response

Tom Keller: We have a quorum tonight so this will be an official meeting.

I think it is important to note that each member here tonight is not here to represent him or herself. He or she is here representing an organization. Each member's job is to gather the information presented at this meeting and take it back and present this information to his or her respective organizations. The ultimate goal at the end of this process is for the SMCAT to make a recommendation whether this proposed freeway should be built.

Along the way, this group has adopted a process. We agreed that we would treat each other with respect. We will continue to live by these rules so that the meetings continue in an orderly fashion.

We also have a process for parking lot issues. From month to month, there are questions brought up at this meeting that can't be answered at that time in great detail. These questions are captured and given to the appropriate members of the project team so that a detailed response can be developed. The answers and questions still requiring answers are compiled into a document called the parking lot issues memorandum. The following month, the parking lot issues memorandum is distributed to the SMCAT and placed on the project Web site.

We have also instituted a system in place that allows the public to ask questions. Near the end of each session, any member of the public who would like to ask a question or two may do so. In the back of the room, Janet Gonzalez has a stack of blue question cards. The public can fill out one of these cards and then at the end of the meeting, either read the question or submit the blue card to me and I will read it aloud. I only ask that if you would like for me to read your question that you please print clearly so that I am able to read the words. Your question can be directed to either the SMCAT or the ADOT project team.

Does anyone have any questions about any articles that have been published in the press over the past month?

No response

Tom Keller: As you know, we sent tonight's materials to you in advance. When we sent you those materials, we made mention that we would be changing the format of the SMCAT meetings somewhat from this meeting forward. All of these changes are in response to information left on the member session feedback forms. The most obvious change was a change in the time allowance. We constructed tonight's agenda to cover the scheduled topics, but notice that we now do not have designated times for each topic. The potential downside to this is that we may spend a disproportionate amount of time on one topic than another. Does anyone have any questions or comments about this new meeting format?

No response

Tom Keller: Okay. As I mentioned, the SMCAT is given session feedback forms to complete. At the break, we will hand out these forms. Please note that there are questions on both sides of the sheet. We ask that you please take the time to complete these.

Fred Erickson: On the back on the form a new question has been added that asks how you feel about the new meeting format. Please answer this question so we know if you like the more interactive experience or if the format could still be improved.

Tom Keller: Mike Bruder with ADOT will begin the presentation and introduce the other presenters, who are joining us tonight. Mike, would you like to get started?

Mike Bruder: Good evening. Tonight's presentation is about hazardous materials, geotechnical resources, energy and utilities. For each of these topics, we have addressed the following questions. What is the issue and why do we study it? Where are they located in the Study Area? What are the impacts of the Action Alternative? What are the impacts of the No-Action Alternative? How can we reduce or mitigate the impacts?

The first topic on the agenda tonight is hazardous materials. On the screen are a few definitions of key elements: underground storage tanks, drywells and aboveground storage tanks. These are some of the things that we typically encounter in freeway projects, such as the proposed South Mountain Freeway.

Hazardous materials could be: radioactive, toxic, corrosive or biohazardous, for example. The list on the screen shows you some of the more common materials that we could encounter in the Study Area.

Why is this something that we study? Hazardous materials in the Study Area could influence construction and operation of this proposed freeway. Contaminated soil near leaking underground tanks may be encountered during construction. Some underground storage tanks may require removal or relocation because of freeway construction. The project team would also be identifying drywells to ensure that we wouldn't be adding contaminants to the groundwater supply. Typically, ADOT first researches and identifies the known sites. This issue would be fully addressed during the property acquisition process. ADOT feels that the best policy is avoidance; however, if hazardous materials are unavoidable, then mitigation is performed. In some cases, hazardous materials may not be discovered until the construction crew encounters them. There is an established process that is in place that the construction crew would then alert ADOT about the situation.

The next presenter on this topic will be Kelly Kading from HDR Engineering. He is the person who wrote the hazardous materials section of the Draft Environmental Impact Statement. To assist Kelly on the subject is Ed Green, the technical expert from ADOT.

Kelly Kading: Thank you Mike. I am Kelly Kading with HDR. My job is working with hazardous materials on freeway projects, such as in the case with this proposed freeway.

When doing the assessment of hazardous materials, a process is followed. The first step has already been completed. This was done when the project team was comparing the different alternatives in the Western Section and looking at the E1 Alternative in the Eastern Section. As a part of this step, we accessed federal, state and county databases of known sites; reviewed historical and current aerial photos of the area and performed field reconnaissance to identify any potential hazardous materials sites in the Study Area.

When looking at the different alternatives in the Western Section, W55, W71 and W101, there wasn't a significant difference in the amount of hazardous materials in those areas—just a few more sites located within the W55 corridor.

We designated each site as being a low-, mid- or high-priority risk. A low-priority risk site is a location where either no hazardous materials release has been recorded, or the site has never been developed. A mid-priority risk site is a location where hazardous materials may have been used or stored or a potential exists for release to the environment. A high-priority risk site is a location where a hazardous materials release either has occurred or large volumes of hazardous materials are stored.

The chart on the screen shows the amount of low-, mid- and high-priority risk sites identified in the W55 and E1 alternatives. Note that no sites were found in the E1 Alternative.

On this map of the Study Area, the low-, mid- and high-priority risk sites are all shown. Most everything seems to be clustered up near Interstate 10, as would be expected. The big yellow dot located at about 51st Avenue and Van Buren Street is the West Van Buren Tank Farm. There is a large volume of fuel that is stored there, which made this area a mid-category risk site. Also in this area is the West Van Buren Water Quality Assurance Revolving Fund, or WQARF, site, which is a high-priority risk site. WQARF deals with large-scale remediation activities. In this area, the WQARF plume is too deep to impact this project. In addition, this plume has been self-deteriorating. This is because the hazardous materials spill causing this plume was some time ago and over time, these materials begin decomposing.

So you may ask about the potential impacts during construction. The potential construction of the freeway itself could be a source of contaminants. This could be due to an accidental release of equipment fuel, lubricants or other hazardous materials. Above- and belowground storage tanks are often used to store hazardous materials. These tanks would need to be removed or relocated well in advance of construction.

If the project were not constructed, no project-specific impacts would be experienced. However, identified hazardous materials sites may adversely affect planned development unrelated to the proposed South Mountain Freeway.

There are multiple things that could be done to reduce or eliminate the impacts. Avoidance is the best method we have. Additional investigations of identified hazardous materials areas could be conducted to evaluate the extent of contamination.

Since drywells are a direct conduit to the groundwater supply, the project team would try to avoid or protect them so they aren't a factor.

A Hazardous Waste Management Plan could be produced. This would outline the process for the handling of any hazardous materials encountered during construction. This would also account for those materials encountered that were not identified earlier in the process. As much as we have a great process, we don't have a crystal ball. Sometimes the construction crew comes across something unexpected.

Some things, such as lead paint inspections, are properly handled before demolition of a structure.

Another issue has less to do with properties but rather, what would be transported on the freeway once it is constructed. ADOT has a process they use for this. Typically, a jurisdiction may request that ADOT consider restrictions of hazardous materials for a particular section of an existing freeway. An example of this is the Deck Park Tunnel near Downtown Phoenix. Because trucks carrying hazardous materials are not allowed in this tunnel, these trucks tend to bypass Phoenix going from Interstate 8 to State Route 85 to Interstate 10.

We always coordinate with the local emergency responders so that they have a voice in the process as well. It is important to note that ADOT has not made a decision about hazardous material transport on this proposed freeway. The restrictions are determined after the freeway has been constructed, as outlined by the ADOT process.

Did I talk too fast? Are there any specific questions that Ed Green and myself may answer?

SMCAT Member: Your map shows a mid-priority risk site at about Southern and 67th avenues. What site is this that is located so close to the Salt River?

Kelly Kading: It has been awhile since we did that initial study.

Ben Spargo: On the screen right now is a list of the W55 alternatives hazardous materials sites. If needed, we can make that available to the SMCAT.

No response

Kelly Kading: I will have to verify that site before I can tell you which one it is.

It is important to mention that over the past few years there has been growth in this area. The project team has been checking the area to see if any new sites have popped up. There aren't any recent sites that we have found.

SMCAT Member: I am curious, obviously ADOT is already acquiring property in the area. What happens if they acquire property that has a hazardous materials site and a decision is made to not build the freeway?

Ed Green: If ADOT acquires a property that has a hazardous materials site, then it is our responsibility to remediate it. However, if we know about the hazardous materials site prior to purchasing the property, we would be working with the property owner to remediate the hazardous materials prior to ADOT purchasing it.

SMCAT Member: You mentioned that a request could be made for a freeway to restrict hazardous materials along a particular stretch. Who can make this request?

Kelly Kading: Typically, a government agency makes this request.

Ed Green: Actually, anyone can make this request, but it usually comes through a governmental agency.

SMCAT Member: At this point in time, have you received any requests from any government agencies that would want hazardous materials restricted on the proposed South Mountain Freeway?

Mike Bruder: No, we have not received any requests.

Kelly Kading: Usually these requests come forward after the freeway is constructed.

SMCAT Member: So what are some of the other things that would cause this restriction to be enacted? Obviously, a tunnel seems to be one of the items.

Kelly Kading: Yes, a tunnel would be one item. Another would be if there were issues of disturbance to a sensitive wildlife habitat. For example, a project in the Pacific Northwest had a river that contained a large number of salmon. Should there be a hazardous spill in that area, there was a critical risk to these fish and their habitat. Because of this, hazardous materials were restricted from using this area of the freeway.

SMCAT Member: What about having a school near a freeway? Would this be something that could limit hazardous materials from using that section of freeway?

Kelly Kading: That would play into it. Another issue might be population density in an area. All of these items would factor into the model.

Ed Green: Currently, there are only three freeways in the Valley where hazardous materials are restricted. They are the Deck Park Tunnel, the US 60 near the Interstate 10 connection and the mile long stretch where Loop 202 crosses the Salt River.

SMCAT Member: How do you clean up a liquid hazardous materials spill on a freeway?

Ed Green: The ADOT Traffic Operations Center is in direct contact with local law enforcement. The first thing we would do is send a city police officer to assess the situation. When we get his or her report, we would then dispatch the appropriate

emergency response unit to begin the cleanup. When the responsible party, the owner of the trucking company, was notified, ADOT would continue working with him or her to complete the remediation.

SMCAT Member: How would gasoline be cleaned off a highway?

Kelly Kading: They would most likely use a sorbent that would absorb the gasoline.

Ed Green: Yes, they would put the sorbent out to absorb as much as they can and they would also begin digging up any dirt that had been contaminated as well.

SMCAT Member: How could a potential hazardous materials spill affect wells? What do you do to prevent the material from entering these systems that provide water to local areas, such as golf courses?

Kelly Kading: This is all determined as part of the assessment process. ADOT would try to ensure that no well receptors would be close enough to the freeway that a hazardous materials spill would enter the well site.

Ed Green: One of the reasons we look for drywells is so if there is ever an event, such as this, ADOT will know where we need to go to prevent the spread of the hazardous materials into the groundwater supply.

SMCAT Member: It is my understanding that ADOT does not have the drywells mapped.

Kelly Kading: The next step would be for the project team to take a well inventory and that is where we would start.

Ed Green: We currently have the list of all of the registered well sites in the Study Area.

Tom Keller: Are there any other questions?

No response

Tom Keller: Would you like to continue, Mike?

Mike Bruder: The second item on the agenda is geotechnical resources. Again, we have listed some definitions that pertain to this topic. You can see that some of the considerations are expansive soil, consolidation-prone soil and fill.

What are geotechnical resources? They are those resources that are related to the soil and bedrock conditions of a particular area. The assessment includes evaluating: geologic features, topography, groundwater, land subsidence and earth fissuring, regional seismic

activity and mineral resources. There are a number of studies that have already been performed by other agencies in the Study Area that have looked at these resources.

Geotechnical resources in the Study Area could influence how a project like the proposed South Mountain Freeway would be designed and ultimately constructed. Both expansive and consolidation-prone soils in the shallow profile may influence the design of freeway sections. Shallow groundwater may influence the design of freeway elements for the W55 Alternative. For the E1 Alternative, rock excavation and construction of rock slopes would be required.

Nick LaFronz with HDR will now be continuing the presentation. Norm Wetz from ADOT is here to assist with any questions that you may have.

Nick LaFronz: I am going to stand and not use the microphone. Let me know if you can't hear me. As Mike mentioned, there have been numerous studies in the Study Area. There were studies of groundwater resources and surface solids specific to the proposed South Mountain Freeway in the late '80s. A subsequent study for the geotechnical resources in the Study Area was done for the Draft EIS in January of last year.

This map shows the rock composition in the Study Area. What you see here constitutes the geotechnical resources that would potentially be impacted.

What are the potential construction impacts? These are pretty obvious things. The excavation or placement of fill could alter existing ground slopes and materials. Shallow groundwater exists near the Salt River, which may influence the design and method of construction of bridge foundations. As you know, the E1 Alternative would require rock excavation. The deep cuts associated with excavating this alternative through the north and south ridges would require a significant amount of rock removal.

After construction of the freeway, it is anticipated that there would be no additional impacts on either the W55 or E1 alternatives. The design for the rock slopes would be made to be as safe and stable as possible.

If the project were not constructed, no project-specific impacts would be experienced.

So how can the impacts be reduced or eliminated? Basically what happens here is that the freeway profile is balanced to minimize the amount of rock excavation. This is called earthwork balancing. Specific plans would be developed for rock slopes, including slope angles, falling rock containment measures and related design features. The Eastern Section could be designed to minimize the amount of rock excavation, as necessary.

How would the cuts be constructed? We have some neat pictures here. I believe these are all taken on U.S. 93 at the Hoover Dam Bypass. The pictures show how the activities progress. For the proposed cuts in the South Mountains, ADOT would be excavating the top 20 to 30 feet of material. The drilling and controlled blasting of bedrock material

would be required. Excavated material would be hauled to other project locations where it would be used for fill.

For this proposed freeway, controlled blasting would need to be done. This slide shows a photo of a blast-hole drilling rig. There are three things that could potentially cause damage from controlled blasting. They are: flyrock, airblast and ground motion. Flyrock is rock that is propelled through the air from a blast. Airblast is an airborne shock wave that results from the blast. Ground motion is the vibration resulting from a blast.

There are certain safety measures that are included with controlled blasting. The bedrock properties are considered when studying the controlled blasting environment. Basically, limiting the amount of energy that is used controls the blast intensity. In that respect, the blasting would be designed to control the vibrations, flyrock and ground motion. The blast vibrations would be monitored and the flyrock contained within the project right-of-way. Prior to starting any controlled blasting, the contractor would notify property owners and public utility companies of the upcoming activities.

Who would be responsible for any damage to homes during the controlled blasting? The contractor would be responsible. In the course of preparing for controlled blasting, the contractor would complete a series of preblast surveys, which are intended to identify and document the existing structural stress and damage of existing homes within a certain proximity of the controlled blast site. This documentation would be captured by taking photos and video of the existing structure damage of these homes prior to conducting the controlled blasting. The documentation would only be used if a homeowner filed a claim or brought to light any issues they felt came about due to the controlled blasting.

Are there any questions?

SMCAT Member: On slide 38, the text states that there would be no impacts to the rock slopes for the E1 Alternative. A few weeks ago, we had a discussion about these rock slopes and how they may degrade over time. For you to put the statement that these rock slopes would not be impacted is very misleading and is irresponsible.

Nick LaFronz: The project team would perform all of the due diligence that we can. We can't predict how this geological material would degrade over the long term; however, we would have provisions for falling rock containment and slope design to protect against erosion.

SMCAT Member: So, how can you say that there will be no impacts expected if you do not know how the slope will perform over time?

Nick LaFronz: The impacts that we are protecting against are impacts to the freeway travelers. This is what is meant when we say that there would be no impacts—to drivers on the proposed freeway.

SMCAT Member: So why do you think there wouldn't be any impacts over time?

Nick LaFronz: I didn't say that there would not be any impacts over the lifetime of this freeway. I said that we couldn't predict how the slopes will perform as they degrade over time.

SMCAT Member: So you think there could be issues with slope degradation in the future to these proposed slopes?

Nick LaFronz: Perhaps there would be issues.

SMCAT Member: Perhaps? Would you agree with the statement or not?

Nick LaFronz: Yes, I would agree that there could be issues with the slopes in the future.

SMCAT Member: I would like to add an amendment to this information as it is stated in the PowerPoint presentation.

Floyd Roehrich: This information is stated as such in the technical report, which we are presenting tonight. We are recording the notes from this meeting, which will capture your comment. We will not be changing the presentation, but your objection to the wording will be recorded. The meeting notes, including your comments here tonight, are part of the public record.

SMCAT Member: I think what the gentleman is saying is that you are stating the information incorrectly and it should be corrected.

SMCAT Member: I know you have done quite a bit of modeling regarding the cuts in the South Mountains. How much volume of dirt and rock would be excavated?

Ben Spargo: I can't give you an exact amount. I would think that the total would be close to 4 million cubic yards.

SMCAT Member: Wouldn't this be more than enough dirt to do the earthwork balancing for the proposed freeway with an at-grade profile with rolling intersections?

Ben Spargo: No. For the proposed profile, which is at-grade, ADOT would still need to acquire dirt to complete the construction of this proposed freeway.

SMCAT Member: I am not a rock scientist. It seems this proposed freeway has a number of overpasses that would not require much dirt or fill. How can you make this assumption, when you haven't even made a decision on the proposed freeway design? With the amount of fill that you will be excavating, I would think that you would need to elevate the freeway in more areas.

Ben Spargo: Throughout the process, we have presented the major intersections that would be crossing the proposed freeway. Fill would need to be used at each one of these intersections so that the approach would satisfy the freeway bridge clearances required. Because of this, ADOT would require more dirt than would be excavated from the rock cuts in the South Mountains.

Tom Keller: Are there any additional questions?

SMCAT Member: The information tonight seems to be skimpy. What about the whole concept of fissures? What about the lack of mapping and knowledge concerning the Gila River Indian Community plans for future expansion? Also, most of your materials seem to be focused on the impact of right-of-way due to controlled blasting and hazardous materials changes in plumes. What is the impact these issues would have on the South Mountain Park/Preserve and the surrounding residential development?

Nick LaFronz: In regards to your question about fissuring, the Arizona Geological Survey is in the process of compiling brand new fissure maps based on their studies, as well as new maps regarding groundwater resources in this corridor. Groundwater withdrawal is a direct cause of fissure formation. Groundwater withdrawal in this area has been less than a foot—this is not enough withdrawal for fissure formation. On Gila River Indian Community land, there could be some fissure formation, since we do not have the mapping associated with this area.

I am unsure how to respond to your second question.

Ben Spargo: I don't know the best way to address your second question. Are you asking that we should discuss how the geological resources would impact other issues in the Study Area? If so, this will be addressed in the future SMCAT meeting that presents secondary cumulative impacts. This topic deals with how the environmental impacts work together or against each other. Are you asking about controlled blasting and how the heavy machinery would be controlled?

SMCAT Member: Would there be controlled blasting in the entire corridor?

Nick LaFronz: The controlled blasting would be limited to the ridges where we would be cutting into the South Mountains.

SMCAT Member: What type of radius would you anticipate could feel the affects of the controlled blasting?

Nick LaFronz: For the controlled blasting operation, the ground vibrations could be felt hundreds of feet away. The contractor would take some test measurements during the initial controlled blasting. At this time, the contractor would start with a smaller blast than needed so that the limits are not exceeded. In my experience, the impacts of the

blasting are limited, unless something goes wrong. In most cases, the charges are set conservatively enough to limit the amount of energy.

SMCAT Member: The blasting area contains a great amount of granite and older alluvium. This material generally doesn't blast too easily. If the contractor is required to monitor and limit his blasting, does this mean that the blasting may need to be done over a longer period of time?

Nick LaFronz: Yes, if the contractor is limiting the energy of the blasts, more blasting may need to be done.

SMCAT Member: Has there been any modeling to see what we should expect from this blasting?

Nick LaFronz: No. The bedrock that would need to be blasted has been characterized, but ADOT has not yet developed a blasting plan.

SMCAT Member: The whole purpose of the blasting conversation is focused on construction. What about the environmental impacts? What are the far-reaching aspects and would there be any significance? If you create openings in the granite by blasting, then the rock integrity begins to change. This could include the water that flows off the mountain. I find this disconcerting that you are not looking at the entire Study Area, but rather, only the alignment. I realize that you will be having a discussion about the cumulative impacts, but this is nowhere on our meeting timeline. When will we have this discussion?

Ben Spargo: I believe it is on the schedule.

SMCAT Member: I suspect that discussion would fall into the topics scheduled for September 25.

Bill Vachon: No. It looks like that topic will be covered on August 28.

SMCAT Member: Letting us know the implementation plan for what happens outside of the right-of-way should be in the parking lot issue memorandum. I do not consider this a complete study if you only report what you are looking for. That is like saying that if someone has a heart attack, you have determined that the problem must have been with the heart. The problem may have been caused elsewhere. With this project, we could have issues in other areas of the Study Area and not just the corridor. It could be a function of the entire mountain.

Tom Keller: Are there any other questions? Remember, we are using our new meeting format tonight. We will continue to answer any more questions you may have on the subject until all questions have been asked.

No response

Tom Keller: Okay. One more reminder that the public should grab a blue question card so that you can write down your questions and have them asked at the end of the meeting.

The time is now 7:10 p.m. We will resume exactly at 7:25 p.m.

Break

Tom Keller: Can we take our seats please?

Thank you very much. If the members of the public have completed any of the blue question cards, please hand them to Janet. Also a reminder for the members of the team that we put the session feedback forms at each one of your seats. This form is double-sided so please complete both sides.

We have two more topics on our agenda tonight: energy and utilities. Ben Spargo will present both of these items. Remember that we blocked out a large amount of time for questions so take advantage of that. The questions that we cannot answer at this time will be added to the parking lot issues memorandum.

Mike Bruder: The next topic is energy. This is a unique item since it is not a physical part of the project—it involves analyzing different variables.

So why do we study energy? Considering the area's population continues to grow, demand for energy will also continue to grow in the region. A project like the proposed South Mountain Freeway is a major investment and it is important to consider whether such an investment would produce prolonged energy savings or whether the No-Action Alternative would provide better energy savings.

With that, Ben Spargo will continue the presentation.

Ben Spargo: Thanks. I want to start by getting everyone focused on the scope of the energy issue. This idea is a very broad issue. The methodology in the Environmental Impact Statement relates energy to the amount of fuel that would be used to construct the freeway. It also takes into account how much fuel motorists within the Study Area would use. So basically the energy analysis compared future conditions with and without the proposed freeway. The end result was that the amount of energy to construct the freeway would be similar to the freeway not being constructed, compensating for the fact that other transportation-type facilities would be constructed in the proposed freeway's place. It would be a wash.

The Maricopa Association of Governments reported the travel data in the Study Area. Using their information, the project team first determined the average speed of vehicles in

the Study Area. They calculated this by predicting the total vehicle miles traveled, or VMT, and dividing this number by the predicted total vehicle hours traveled, or VHT.

To determine energy consumption, the project team evaluated the anticipated vehicle mix and fuel economy. These projections were based on available data and not projections. In any case, since the analysis is comparative, the same fuel economy of today's vehicles was used. What the project team is trying to do is predict energy consumption 30 years from now, but this analysis assumes the same factors so the relative values would also be the same. Because of this, it was found that the Action Alternative would result in the use of 541 million gallons of fuel annually within the Study Area in 2030. The No-Action Alternative would result in the use of 733 million gallons of fuel annually within the Study Area in 2030. The No-Action Alternative had lower energy efficiency because of the high volume of traffic and lower vehicle speeds, including stop and go travel for longer durations of time. If the freeway were not built, therefore, more energy would be used for vehicular travel.

Does anyone have any questions?

SMCAT Member: I have a question about your assumptions. You presented that if the freeway is not built, you will still have the same amount of vehicle miles traveled in the area?

Ben Spargo: No. With the freeway in place, there would be more vehicle miles traveled but speed and fuel efficiency would be higher in the Study Area corridor. There would be less congestion and less time spent in traffic.

SMCAT Member: Define what you mean when you say Study Area corridor.

Ben Spargo: This would encompass the entire Study Area from Interstate 17 to west of Interstate 10 to south of the South Mountains.

SMCAT Member: But you said within the corridor, don't you just mean within the proposed freeway alignment?

Ben Spargo: I am referring to the entire Study Area and not just within the right-of-way.

SMCAT Member: Forgive me if you covered this in another meeting. Does this mean that air quality would be cleaner?

Ben Spargo: We have not yet covered that topic. I would rather defer that question until we have the SMCAT meeting that discusses the air quality issue.

SMCAT Member: I was wondering if we could get more details about what you presented here. I am having a lot of trouble understanding how you arrived at the numbers you presented.

Ben Spargo: The technical report is available. This document shows more of the computations that were used to determine the numbers.

SMCAT Member: I don't understand how more energy would be used by reducing vehicular speed. It seems that cars get better gas mileage at lower freeway speeds.

SMCAT Member: You can get bad gas mileage at lower vehicular speeds.

SMCAT Member: I know that hybrid vehicles actually get better gas mileage at lower speeds with repetitive braking. Don't you think that the future vehicle mix of traffic in 30 years could be much different than today's composition of vehicles?

Ben Spargo: We are just trying to show the relative traffic for construction of the freeway versus not building the freeway.

SMCAT Member: You are assuming that people wouldn't use mass transit as well?

Ben Spargo: The breakdown of hybrid vehicles as well as mass transit would be the same whether the freeway was built or not.

SMCAT Member: Instead of spending the money to construct this freeway, what if it were used to fund mass transit?

SMCAT Member: I currently use the park-and-ride for my daily commute to work in Downtown Phoenix. There are 198 people on this bus. I take umbrage when it is said that this freeway would be the ultimate solution to relieve traffic congestion. I think that for this topic, the full technical report should have been presented to this group. The way you presented this topic tonight was much too simplistic.

Ben Spargo: The methodology of this topic was simplified. The project team was tasked to determine whether an undue tax would be placed on the environment due to vehicle use, should the proposed freeway be constructed.

SMCAT Member: I think your study is right on target. The purpose of this proposed freeway is not just to build it for one neighborhood, but rather, for the region. With the increase in Valley population, a person needs to be able to use a freeway to drive in a more efficient manner—not just to accommodate Ahwatukee residents. Those people travelling from the East Valley to the West Valley and vice versa do not want to have to travel through Downtown Phoenix. There are also some people who do not want to use the park-and-ride.

SMCAT Member: I look at this proposed freeway as a facilitator for no change. How can the state or cities provide adequate service as long as we just keep building these

things to make driving more pleasant? Something has to change. Just because more people move here doesn't mean that we have to provide better transportation facilities.

SMCAT Member: Ben brought up the point that this issue involves fuel usage, including the cost for construction equipment to build this freeway. The cost estimate for this freeway has been said to be \$1.7 billion for over a year. In the last year alone, the cost of fuel has gone up 35 percent. When can the cost estimate for this proposed freeway be adjusted?

Ben Spargo: To our best of our knowledge, the project team is basing the cost estimate on recent construction estimates for ADOT projects.

SMCAT Member: It would be erroneous to assume that construction costs have not changed for over a year.

Ben Spargo: I think we will continue to monitor these costs.

SMCAT Member: This is my third year as a SMCAT member. When it comes to energy, this summary given to us tonight contains five pages of material. It appears that this is a simple issue—it is not.

In regards to another SMCAT member comment, I think people are making changes the way they travel based on the increase in fuel costs.

Mike Bruder: The fuel costs to construct a freeway are really a minor part of the cost estimate. Concrete and steel costs affect the cost estimate more directly.

SMCAT Member: The prices for concrete and steel have also gone up by double digits in the last year.

Mike Bruder: What we have done is taken recent construction bids and looked at the current cost estimate for this proposed freeway to make sure that the estimate is still reasonable.

SMCAT Member: We are looking at a cost estimate that is over a year old so I won't buy that argument.

SMCAT Member: Has the project team looked at the possibility of updating the cost estimate?

Mike Bruder: We have not gone back to do this.

SMCAT Member: I would like to see some of the underlying figures that you used to compute your energy numbers. I don't see that much fuel being used in the Study Area.

Ben Spargo: It is not just assessing traffic volume from Ahwatukee to Laveen. The project team also had to study the vehicle types and fuel economy of these vehicles.

SMCAT Member: The way I understand the issue, when a person accelerates his or her vehicle, more gasoline is burned. If a person is on a freeway, there is less acceleration and so he or she wouldn't be burning as much gasoline. I have no trouble with the numbers that have been presented tonight.

SMCAT Member: Concerning the 541 million gallons of fuel, what is the estimated daily volume that is anticipated for this proposed facility?

Ben Spargo: The volume varies depending on the section in which you are referring.

SMCAT Member: Would it be safe to say that 170,000 vehicles per day would be using this proposed freeway?

Ben Spargo: The number may be close to that on some stretches.

SMCAT Member: So if the freeway were not constructed, these 170,000 vehicles would go away?

Ben Spargo: Not necessarily. The vehicles would be redistributed to other freeways or arterial streets.

SMCAT Member: In the Study Area, there are a certain number of vehicle miles traveled right now. You presented that these vehicles miles will increase dramatically. I don't see how the project team determined that this would happen.

Ben Spargo: The project team looked at the vehicle miles traveled in the Study Area would be greater due to the increase in traffic on the freeway. This would also directly relate to the vehicle hours traveled, so the general rationale is that without the construction of this proposed freeway, the vehicle energy usage would be greater.

SMCAT Member: So when vehicles use Interstate 10, they would not be considered in the Study Area? All of those miles traveled wouldn't count? I don't see how your numbers support this and are accurate.

SMCAT Member: I want to commend the SMCAT member on her earlier comments that we need to find another way to solve traffic congestion rather than by just building more freeways. The greenhouse gases caused by increased vehicular traffic have become a major concern.

SMCAT Member: Yes, we are basically facilitating poor public policy.

SMCAT Member: Ben, did I hear you correctly? Did you say earlier that you don't think this freeway would be congested?

Ben Spargo: I am not saying that this potential freeway would not be congested at times. If you have more vehicles on the roadways, there would probably be times when this freeway could be congested.

SMCAT Member: Wouldn't adding more mass transit options, such as busses, be another alternative?

Ben Spargo: Mass transit is figured into the Regional Transportation System.

SMCAT Member: It seems that this information is all too overly simplistic.

SMCAT Member: Is there a formula that was used that incorporates the number of vehicles miles traveled and number of vehicle hours?

Ben Spargo: Yes, a formula was used.

SMCAT Member: Is this a standard formula that is used by all traffic-engineering professionals?

Bill Vachon: A standard traffic demand model was used, which is based on vehicle travel speeds. This modeling is standard around the country. I can't say whether it is used in every case, however.

SMCAT Member: So this was not something just developed for this project?

Bill Vachon: No. This was a typical type of modeling that was used.

SMCAT Member: I have been sitting in these meetings from month to month. I would like to see a show of hands—for or against this proposed freeway. It seems that the questions that some people bring up at these meetings are always contradictory to what is being presented. It seems that some people are against this freeway prior to hearing the topic information.

Tom Keller: Is there a motion?

SMCAT Member: Yes, I make a motion.

Tom Keller: Is there a second to this motion?

SMCAT Member: I second that motion.

Tom Keller: All in favor?

Fred Erickson: There are six members in agreement of the motion and eight members opposed.

Tom Keller: The motion fails.

SMCAT Member: My issue is not with the formula that was used to determine some of the numbers for energy, but with the assumptions that have been made. Throughout this process, the project team has acknowledged that the data in the study is old because this process takes so long. All of these assumptions about fuel economy and saving gasoline are probably outdated. This proposed freeway would end up being just as congested as the Loop 101 or Interstate 10. As long as people continue moving here to live and work, we will continue seeing congestion on our freeway system, even when new freeways are built.

SMCAT Member: On slide 51 of the PowerPoint, you mentioned that there was an anticipated vehicle mix. Do you have specific numbers for each of these categories?

Ben Spargo: We have the vehicle mix listed as percentages. I would have to look up this information.

Fred Erickson: Can we provide the most recent technical report to the SMCAT members?

Bill Vachon: We will need to review the document first.

SMCAT Member: So when you provide us with the vehicle mix percentages, can you provide a breakdown of each of the elements: cars, light and heavy trucks, etcetera?

Ben Spargo: Yes. We can provide this information.

SMCAT Member: So the current cost estimate for this proposed freeway is \$1.7 billion. What is the date of that cost estimate?

Ben Spargo: I do not recall.

SMCAT Member: Can this be in the parking lot issues memorandum?

Ben Spargo: Yes.

SMCAT Member: If and when could this cost estimate be updated?

Mike Bruder: We do an annual review of the costs.

SMCAT Member: It sounds like that hasn't been done in over a year. When can we get a date of the next adjustment to this estimate and the current projection?

Bill Vachon: You must remember that the cost estimate used to determine the initial estimates was for comparative purposes only. As we move forward, we will have to update those impacts to the costs.

SMCAT Member: It should be easy to estimate. Just figure out what the cost of construction is per mile then multiply by the number of miles in this proposed freeway. It shouldn't be that difficult to get us an update.

SMCAT Member: The words that were used in the evaluation of the energy issue were mathematical equations, formulas and estimates. This appears to have been an unscientific study that used an inflexible formula. There are already some people not driving as much because of gasoline prices. I think that at least half of the drivers you are projecting for this freeway will not be using it. I just wanted to make that comment for the record.

SMCAT Member: I noticed that this information is based on a projection for the year 2030. By then, we are going to see some major changes regarding transportation. Experts have predicted that gasoline will be priced at \$12 a gallon in the not-so-distant future. This has already had an effect on the price of small used cars. We can expect to see more changes. By 2030, technology advances will be more attractive and feasible.

SMCAT Member: My problem is that the assumptions are completely wrong. The project team keeps using the Maricopa Association of Governments as the starting point; however, MAG's information is incorrect. Everything they produce does not account for anything related to the Gila River Indian Community. The Community has been planning for new developments after this proposed freeway is constructed. The project team needs to get this information and plug it into their studies. Until that is done, the numbers are meaningless.

SMCAT Member: We should be looking at the vehicle mix and how it relates to health issues. Is the Federal Highway Administration looking at how energy consumption rates affect individual's health? We are already seeing some changes in the pattern. This is not just about the freeway; it is about regional transportation. How many more busses could be added to the Regional Freeway System and how many cars would this eliminate from the roadways?

Bill Vachon: The travel demand model looks at what is in the Regional Transportation Plan over the next 20 years. We can't assume something that isn't there. We are just looking at what exists.

SMCAT Member: People are already making different transportation choices. People are beginning to carpool more and telecommute. Wouldn't this have an impact on how

energy consumption is calculated? I know that the project team is just giving us materials to support having more freeways, but we need to use more critical thinking—not just the ends and means.

Tom Keller: Does anyone else have questions?

SMCAT Member: This sounds like you are talking about an entity in a cave that is going to continue, no matter what is happening around us. It is not a blip in the grand scheme of things and it needs to be factored in somehow. I think it is wrong to use a traffic model that gives you information that you put total faith in, no matter if the assumptions are correct or not. You have a situation like the Titanic going on here.

SMCAT Member: I read in a newspaper article that the City of Maricopa is planning for a new park-and-ride and that other cities may be following suit. This could alleviate some of the traffic congestion. This should be considered when using the traffic model.

Tom Keller: At the start of tonight's meeting, I brought up the new meeting format and the potential of having expanded member discussions but we may not cover all the topics in the agenda. We are running short on time for tonight's meeting. What is the pleasure of the team tonight? Would you like to roll the topic of utilities to next month's meeting or continue with the presentation tonight? How long is the presentation?

Ben Spargo: The length of the presentation is not the issue. It would depend on the amount of questions the SMCAT members would have.

Tom Keller: Is there a motion to vote on this?

SMCAT Member: I make a motion that we move to the public question portion of the meeting.

Tom Keller: Is there a second?

SMCAT Member: I second the motion.

Tom Keller: All in favor?

Fred Erickson: There are 11 members in agreement of the motion and 5 members opposed.

Tom Keller: The motion passes. We will continue with this topic at the beginning of the next presentation.

SMCAT Member: A year ago we agreed that the public would be able to ask their questions on blue comment cards. Are we not going to honor this?

Tom Keller: Yes. We will be doing that now.

SMCAT Member: I have one more issue regarding scheduling. Since it is the summer, many of us have vacation plans. I would like to make sure that we are not overloading the committee and it may be good to take a break, at least for a month anyway.

SMCAT Member: I would suggest that we break in August.

SMCAT Member: I think it would be a good idea.

Tom Keller: We have a series of topics scheduled from now through September.

SMCAT Member: I would be in favor of doing a two-month break.

Tom Keller: Remember, all of you have constituents in the organization that you are representing. If you are unable to attend a meeting due to vacation plans, you can always have someone attend on your behalf.

SMCAT Member: It is not this committee that is holding up this process.

SMCAT Member: I heard that we would not be seeing the Draft Environmental Impact Statement until 2009. In my mind, we have the time to take a summer break in order to stretch these meetings out.

Tom Keller: We have these meetings scheduled into September. I think the first option should be that you have someone from your organization attend on your behalf. However, I think we could give back one month for the summer by having a break.

SMCAT Member: Is there a motion?

SMCAT Member: I say we skip the month of July.

SMCAT Member: What are the dates for the July and August meetings?

Tom Keller: The meeting dates are July 24 and August 28.

Tom Keller: Is there a motion to vote on this?

SMCAT Member: I make a motion that we have a month break during the summer.

Tom Keller: Is there a second?

SMCAT Member: I second the motion.

Tom Keller: All in favor?

Fred Erickson: There are six members in agreement of the motion and eight members opposed.

Tom Keller: The motion fails.

At this time we will take any public questions.

Public Written Question: Please confirm what part of the SMCAT meetings becomes public record. Do questions raised by members and the public become part of the Environmental Impact Statement?

Bill Vachon: The actual question would not be included in the Draft EIS. However, the comment will be documented in the project record.

Public Verbal Question: Can you clarify what you mean?

Bill Vachon: The Draft Environmental Impact Statement is the documentation of all the analysis that was performed. The questions received leading up to the public release of the Draft EIS are summarized and incorporated into the document. When this document is released, there will be a comment period where we will probably receive thousands of questions. These questions and ADOT responses will be incorporated into the Final EIS.

Public Verbal Question: So these public questions would not be answered?

Bill Vachon: No. I didn't say that.

Public Verbal Question: Who would be developing responses to the questions?

Bill Vachon: The project team would work with the Federal Highway Administration to draft responses.

Public Written Question: Will the energy study become a part of the Environmental Impact Statement?

Bill Vachon: Yes, it will be a part of the EIS.

Public Written Question: The energy study was one of the most disingenuous reports I have observed as part of this study. When exactly would ADOT update its cost estimates with regards to the property, in particular, and the rising costs of automotive motor fuels?

Ben Spargo: I think we will be looking into that as one of our parking lot items.

Tom Keller: Are there any other questions besides these three I have in my hands that were submitted earlier?

Public Written Question: What is taking so long? The EIS was due in the fourth quarter of 2007, and the phrasing or definition of one section will add over a year to the process? It appears there is a problem that shall be cured via antics with semantics. From the outside it is difficult to determine what the problem is, deliberate evasion or political necessity can remain conjecture. If you won't say what "it" is, can you at least address why "it" can't be stated, and how "it" attained the power to delay this project?

Timothy Tait: I think we have been up front talking with you about the Traditional Cultural Property issue with the Gila River Indian Community. ADOT is currently in the process of defining the boundaries and what might be developed to reduce the potential impacts.

Public Written Question: Information presented at a prior meeting suggested that the Kyrene School District has mediated the proximity to the freeway and if members of the team were interested in details, they could contact the District. I know that the Kyrene School District (and specifically some of the affected schools) is the reason some people purchased homes that shall be affected by the South Mountain Freeway. I have read as many as 7,000 students daily will attend school within two blocks of the freeway, and some will be within 70 feet. If our wards are not significant factors in the build/no build decision—there is no value to this process. This team must consider the effects of the freeway upon the Kyrene School District. When will this be on the agenda?

Timothy Tait: The issue here is with air quality.

Public Verbal Question: Yes. How would it affect schoolchildren in immediate proximity? In the past, I heard an ADOT representative tell someone that they could answer this question in their office. Why can't it be explained here tonight?

Timothy Tait: I can't answer what someone else wrote in the Draft EIS. There is a chapter devoted to the air quality issue, which is one of the issues that are brought up the most.

SMCAT Member: So the schools will not be addressed in the Draft EIS?

Timothy Tait: It will not be addressed as a separate issue.

Public Written Question: Based on coordination with the City of Phoenix, the service traffic interchanges at 32nd Street and 27th Avenue were removed (information on ADOT Web site). What method concludes removing an interchange supplanting Pecos Road's second highest volume is beneficial? The affect on services and emergency response should be discussed by the SMCAT. If it is determined to be outside the scope, may we have the contact information for those involved in the coordination?

Ben Spargo: Some of the reasoning had to do with physical impacts to the residential developments there. I couldn't speak for the City of Phoenix as to why they made that decision.

Mike Bruder: You would need to contact the City of Phoenix Street Transportation Department to find out the answer to your question.

SMCAT Member: The gentleman was referring to a comment I had made. In all fairness, air quality is a future agenda item that will be discussed.

Public Verbal Comment (question directed at a SMCAT member): Who are your constituents?

SMCAT Member: That information is updated in the monthly newsletter. I will be happy to get you the information as far as when the next newsletter will be published.

Public Verbal Comment: This is the first time I have heard about these SMCAT meetings.

SMCAT Member: If you read the *Ahwatukee Foothills News* or *The Arizona Republic*, you would know about these meetings.

Public Verbal Comment: I only learned about these meetings by talking to my neighbors about the Foothills Reserve Homeowners Association meeting that was cancelled.

SMCAT Member: We invited members of the Foothills Reserve Homeowners Association to our community social a little over a year ago, where ADOT had representatives to discuss this project. This social was advertised as well so I am not sure how you haven't heard about these meetings. All of our homeowners are mailed a newsletter so you should have received it. Please come to one of our homeowners' association meetings.

Public Verbal Comment: It is that group of individuals that are going to be the ones whose house are destroyed should this freeway be constructed. I also think it is interesting that a chicken house contractor will be going into people's houses before and after the controlled blasting has occurred. The homeowners won't know these individuals. Why would they want them in their homes? The report of energy consumption was a false positive. The percentage of fuel now and in 2030 is just a drop in the bucket. I just wanted to get my comments out there.

Public Written Question (not asked during this meeting, but turned in to be added to parking lot issues memorandum): On slide 35 of the PowerPoint, a geotechnical investigation of the cut areas was completed with the original freeway documents in

1987? Was this updated to the current time? If so, can this be made available to the SMCAT members?

Public Written Question (not asked during this meeting, but turned in to be added to parking lot issues memorandum): Is there a blasting plan that can be released to the SMCAT members?

Public Written Question (not asked during this meeting, but turned in to be added to parking lot issues memorandum): On slide 38 of the PowerPoint presentation, “the rock slopes for the E1 Alternative would be designed using industry-accepted guidelines: therefore no impacts are expected.” Has a technical report been issued, and if so, can it be made available to the SMCAT members?

Public Written Question (not asked during this meeting, but turned in to be added to parking lot issues memorandum): On slide 25 of the PowerPoint presentation, identification of hazardous materials sites may adversely affect planned development unrelated to the proposed South Mountain Freeway. What are these?

Public Written Question (not asked during this meeting, but turned in to be added to parking lot issues memorandum): Can the list of sites for identified sites be available to the SMCAT members?

Public Written Question (not asked during this meeting, but turned in to be added to parking lot issues memorandum): Slide 28 of the PowerPoint presentation references “developing, implementing and maintaining” a list of hazardous material routes. What are these routes today? What are the hazardous materials being transported?

Tom Keller: Thanks, folks. Is there a motion to adjourn?

SMCAT Member: I make a motion that we adjourn.

Tom Keller: Is there a second?

SMCAT Member: I second the motion.

Tom Keller: All in favor?

Majority of hands were raised

Tom Keller: The meeting is adjourned.

Meeting ended at 8:35 p.m.